

THE SUBWAY PROBLEM

AN ADDRESS DELIVERED BY

WILLIAM G. McADOO, Esq.

AT THE SIXTH ANNUAL DINNER UNDER THE AUSPICES
OF THE BOARD OF TRUSTEES OF
PLYMOUTH CHURCH

BROOKLYN

THURSDAY EVENING, JANUARY 19, 1911

*Jimmels
Hudson & Manhattan
Tunnel.*

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Mr. Chairman, Ladies and Gentlemen:—

The Subway Problem is not so intricate and complex as is generally supposed. It is, in fact, quite simple. The difficulty arises from the confusion of the public mind, which has been deflected from the main issue by many extraneous considerations. If the essential facts can be put together in an easily comprehensible form, a real service will be rendered. In order to do this, the law governing the construction and operation of subways in New York ought first to be understood.

Upon the Public Service Commission, and upon it alone, rests the duty of laying out and determining routes and of awarding contracts for construction. After this the Board of Estimate and Apportionment is charged with the duty of approving said contracts and of appropriating the necessary money to carry them into effect.

In the discharge of this duty the Public Service Commission, after years of study and work, evolved and adopted plans for the so-called "Triborough Route." The backbone of this system is a trunk line extending from the Battery under Broadway and Lexington Avenue to 138th Street, in the Bronx, from which point there are two branches, one extending to Woodlawn Cemetery, the other to Pelham Bay Park. In Brooklyn it embraces the Fourth Avenue Subway, now under construction, extending across the Manhattan Bridge to Centre Street, and terminating under the new Municipal Building near City Hall Park, in Manhattan. Connecting with the Fourth Avenue Subway at DeKalb Avenue, another line proceeds under Lafayette Avenue to Broadway, Brooklyn, thence westwardly under Broadway and across the Williamsburg Bridge to the Centre Street Subway, this line also terminating at the new Municipal Building. As the Brooklyn system, so planned, was disconnected entirely from the trunk line in New York, it was proposed to build a spur under Canal Street with a transfer station at Broadway, so that Brooklyn traffic might be interchanged at that point.

No sooner had invitations for bids for construction been invited, than attacks upon the Triborough system began to emanate from many quarters, and by the time the bids had been opened, these attacks had produced a sufficient effect to make it doubtful whether or not the Board of Estimate and Apportionment would vote the necessary money for the construction of the system. Among the chief arguments urged against it were:

Excessive cost, due in great measure to the unusually large dimensions adopted, and to the so-called "reservoir" stations; defects in the route and operating scheme itself, resulting in large part from the failure to provide for through operation of trains between the boroughs of Brooklyn, Manhattan and the Bronx.

At this time no proposal had been submitted by the Interborough Company for extensions of its system upon any comprehensive or definite plan, and the whole situation appeared to be in a hopeless state. No one was attempting to meet the arguments advanced by the antagonists of the Tri-

borough system, when, on the 18th of November, the Hudson and Manhattan Railroad Company filed a proposal with the Commission offering to provide \$50,000,000 to equip a modified Triborough System and to operate the same. At that time it was understood that the large dimensions of the Triborough plan must be adhered to and the offer was based on that specification. Since the Interborough's offer is based on a smaller dimension, which is, apparently, now considered sufficient, all Triborough figures of cost should be revised on the Interborough dimension, to get a fair comparison between the cost of the Independent System and the Interborough's extensions.

This proposal was limited to the 15th day of December, 1910, the Company having stated to the Commission that, unless definite action was taken on or before that date, the proposal would be withdrawn. No action having been taken, the offer expired.

On the 3rd of December the Interborough submitted to the Public Service Commission an offer to build certain extensions, appropriating a part of the Triborough route, and including a subway under Seventh Avenue from 42nd Street to the Battery and an extension under Flatbush Avenue and Eastern Parkway to Buffalo Avenue.

Without taking final action, the Commission referred this proposal to the Board of Estimate and Apportionment for an expression of that Board's opinion as to whether or no the general idea was acceptable before the Commission would discuss the details with the Interborough.

The Board of Estimate and Apportionment has the matter under advisement. Meantime, all bids for construction of the Triborough system are held in abeyance, and no progress seems possible until the Interborough's offer has been definitely disposed of.

THE ISSUE.

The real question is:

Shall the City build an independent system of subways, with its own money, to be equipped with private capital and operated under a short-term lease, the City to share in the profits, thus assuring competition?

or

Shall the City permit the Interborough Company to build extensions of its present system upon terms that, in effect, create a lease of 49 years' duration, and require \$53,000,000 of City money, thus assuring a monopoly?

A vital issue of municipal policy is here presented. Upon its wise determination, the welfare of the community depends for many years to come. The relative merits of "independence" and "monopoly," as represented by the two plans, must, therefore, be considered.

THE INDEPENDENT SYSTEM.

Throughout I shall refer to the system I have in mind as the "Independent System." It is the same as the "Triborough Route" with certain modifications and additions, as shown on the map submitted. (Exhibit 1.) It provides for a trunk line from the Battery to 138th Street under Broadway and Lexington Avenue, for two branches in the Bronx—to Woodlawn Cemetery and Pelham Bay Park, respectively; for the Lafayette and Broadway loop in Brooklyn, and it takes in the Fourth Avenue Subway, the Williamsburg and Manhattan Bridges, and the Centre Street loop.

Five very essential and necessary additions and modifications have

been made, which, in my judgment, not only make for a system of great flexibility and efficiency, but also overcome the fatal defects of the Triborough route.

First. By physically connecting the Manhattan and the Williamsburg Bridges through the Centre Street loop to the main trunk at Broadway near Spring Street, and at Broadway and Vesey Street. This will enable trains operated over both the Williamsburg and Manhattan Bridges to be run through the Centre Street loop on to the Broadway trunk line both for uptown and downtown traffic, thus making the bridges an effective and essential part of the system and obviating the chief objection heretofore urged against this part of the Triborough plan, and, at the same time, it eliminates the necessity for constructing the expensive and unsatisfactory Canal Street subway. (Exhibit 2.)

Second. By the construction of a line extending from the Lexington Avenue trunk at the Grand Central Station, under 42nd Street and Sixth Avenue to Herald Square, thence down Broadway to 10th Street, where it again joins the main trunk line, thus curing another serious defect of the original Triborough system by providing for the delivery of traffic through the congested Broadway section on the West Side and landing passengers within one block of the Pennsylvania Railroad station.

Third. A new tunnel under the East River, either from Liberty or Wall Street, Manhattan, and entering Brooklyn under Pineapple or Cranberry Street, is also contemplated. It is indicated in dotted lines on the map. It can be built for approximately \$8,000,000.

Fourth. Relief for Queens is brought within reach by this plan by a continuation of the Broadway Subway in Brooklyn to the Queens County line, which will provide an admirable shortcut to up-town and down-town New York via Williamsburg Bridge with the proposed connections in New York at Spring Street and at Vesey Street. Or an extension can readily be made from 59th Street and Lexington Avenue crossing the new Queensboro Bridge.

Fifth. A new feature is the proposed tunnel connection with Staten Island, which can be effected by a branch of the Fourth Avenue line beginning at or about 67th Street and extending westwardly under the Bay to Staten Island. This is an entirely feasible piece of engineering, and, while the cost is not included in the figures I shall give you, it can be added to the system at any time. This will cost \$12,000,000, possibly less.

The dimensions proposed are somewhat larger than the present Interborough, but not so large as the Triborough cross section, and at all express stations it is planned to have loading and unloading platforms, so that the collision of traffic which now results at express stations of the present Subway shall be prevented. The so-called "reservoir stations" have been cut out as being unnecessary and unduly expensive. The general type of construction is of the very best and admits of the operation of improved cars longer than the present Interborough type, assuring a larger capacity and greater economies in operation. The ventilation system will be a great improvement over the Interborough system.

Taken all in all, this system will be, in its construction and equipment, a distinct advance over the present Subway. If begun now and logically carried out, it will prove the most comprehensive and effective transportation arm yet proposed. It can be built and put into operation within five years.

COST.

Careful estimates of competent engineers show that the cost of this system, as shown in solid lines on the map, including tracks and signals, will not exceed \$107,000,000. The City has \$60,000,000 in hand. \$10,000,000 per annum, which the Comptroller has repeatedly stated that the City can easily set aside for the next five years, will produce an additional \$50,000,000, making a total of \$110,000,000, which is all that the City will have to provide to secure this splendid transportation facility.

The details of cost are as follows:

Dimensions of subway to be same as Interborough with increase of 9 inches in vertical height

ITEM	Length of Line	Length of Single Track	Cost of Tunnel Construction	Cost of Track Construction, Signals and Station Finish
1. Broadway-Lexington Ave., Battery to 157th St.	10.32	39.00	\$48,014,000	\$5,135,000
2. 9th St. to 33d St., via Broadway	1.27	2.54	5,750,000	410,000
3. Lafayette Avenue, Brooklyn	2.70	5.40	4,500,000	520,000
4. Broadway & Williamsburg Bridge to Lafayette Ave., Brooklyn	2.20	4.40	5,280,000	814,000
5. Jerome Ave. to Woodlawn	5.00	15.00	4,100,000	1,324,000
6. Pelham Park via 138th St.	6.73	17.46	8,642,000	1,785,000
7. Connection, Lexington Ave. & 42d St. . . . .	.10	.20	500,000	50,000
8. Williamsburg Bridge	1.50	3.00	120,000	120,000
9. Centre St. Loop	1.17	2.34	510,000	510,000
10. 4th Ave. Subway	3.90	15.40	1,650,000	1,650,000
11. Connection of Williamsburg Bridge Line to Broadway . . . . .	.26	.53	1,220,000	42,000
12. Connection of Bridge Loop with Broadway Line at St. Paul's Church Yard . . . . .	.28	.57	1,400,000	50,000
TOTALS	35.43	105.84	79,406,000	12,410,000

Total Mileage, single Track	105.84
Total Estimated Cost, Tunnel Construction	\$79,406,000
Total Estimated Cost, Track and Station finish, etc.	12,410,000
Total Estimated Cost of Structure	91,816,000
Estimated Cost of Grand Central Extension, 33rd St. via 6th Ave. to Lexington Ave.	5,300,000
	97,116,000
Interest during construction, 10%	9,711,600
Grand Total Estimated Cost	\$106,827,600
or	
Funds to be supplied by City—say	\$107,000,000

The cost of electrical equipment, including ducts, cables, improved cars, power houses, storage yards, shops, etc., and interest during construction, will amount to \$47,000,000.

An operator can, in my opinion, be found to provide this \$47,000,000, so that the City's credit need not be taxed for that amount.

WILL THE SYSTEM PAY?

Passengers carried for the year ended June 30, 1910, per mile of single track operated:

Interborough Subway	3,700,000	Passengers
Hudson Tubes	3,500,000	Passengers
Manhattan Elevated	3,240,000	Passengers

As its lines are as well, if not better located, than the Interborough, the Independent System should, at the outset, carry as many passengers; but, assuming that it carries only two-thirds as many as the Interborough, it should have a traffic the first year of 2,478,000 passengers per mile of single track. As the single track mileage will be approximately 106, the gross traffic for the first year should be 262,668,000 passengers (719,638 passengers per day) which, at a five-cent fare, would give a gross passenger revenue of \$13,133,400 per annum.

Operating expenses and taxes would not exceed 40% of gross passenger revenue—(Interborough Subway operating expenses and taxes for year ended June 30, 1910, were 35.75 per cent.).

This will produce a net revenue of.....	\$7,880,040
Add revenue from advertising.....	400,000

Total net revenue.....	\$8,280,040
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Deduct:

Interest 6%, Sinking Fund 1% on \$47,000,000 equipment	\$3,290,000	
4½% on \$107,000,000 City Bonds.....	4,547,500	7,837,500
Surplus—1st year	\$	442,540

These figures show that the system will earn fixed charges from the start.

In my estimates I have provided for a sinking fund of 1% on the City's investment beginning with the 4th year, in order to give the new system a

chance to become established. The following is a tabulation of the estimated yearly surplus after payment of all fixed charges and sinking funds, for the first ten years:

1st year	\$ 442,540
2nd year	1,104,544
3rd year	1,766,548
4th year	1,358,552
5th year	2,020,556
6th year	2,682,560
7th year	3,344,564
8th year	4,006,568
9th year	4,668,572
10th year	5,330,576
Total profits	\$26,725,580

Under an operating contract for an equal division of profits between the City and the Operator, the City would receive in 10 years the sum of \$13,362,790 over and above interest on its investment and a sinking fund of 1% per annum.

At the end of the 10th year the capacity of the system will not have been exhausted; there will remain a large capacity in reserve, which will, from time to time, be called into use as the necessities of the community grow, thus increasing earning power and assuring a continually expanding dividend on the City's interest in the enterprise.

With such a showing as this would any sensible business man, standing in the shoes of Father Knickerbocker, throw away such a valuable property and such a splendid opportunity to increase his wealth? As a business matter pure and simple, it is the thing for the City to do. I think it is a moral question as well, but so many people seem to think in terms of business only that I put my argument on that ground alone, notwithstanding the fact that I consider that there ought to be moralities in business as well as in other things. Not only is the construction of the Independent System justified by the City's ability to invest the money, but also by the large and profitable financial results which will flow from the investment. In addition, a great system of transportation, owned and controlled by the City, is established. It can always be operated in the best interests of the people, and it can be extended from time to time as the public necessity may require. Under the form of lease which I would suggest, the City can control the operator in the general interest of the travelling public, and that, in my judgment, is one of the most essential things to be achieved if a permanent solution of the transit problem in this great and growing community is to be found.

IS THERE ENOUGH TRAFFIC TO GO AROUND?

The question arises as to whether or not there will be sufficient traffic to justify the estimates of earning power which I have just given. A few figures ought to be sufficient. The increase of traffic on the Interborough Subway for the last four years has averaged 23.75% per annum. The increase on the elevated railroads for the past year was 6.36% per annum. The increase on the Brooklyn Rapid Transit lines for the past five years has averaged almost 9% per annum. It would not be fair to assume that the traffic on the present Subway, even if it had the capacity, would continue to increase at the rate of 23.75% per annum. I have, therefore, assumed that it may increase at the rate of 10% per annum.

The following figures represent the number of passengers per annum, for the years indicated, which would be offered to the transportation companies, in excess of those carried during 1910, provided the business continues to increase at the percentages indicated:

	Per Cent. Increase	1915	1920	1925
Interborough Subway	10%	130,000,000	260,000,000	390,000,000
Manhattan Elevated	6.36%	85,000,000	170,000,000	225,000,000
Brooklyn Rapid Transit . . .	8%	246,000,000	492,000,000	738,000,000
		<hr/> 461,000,000	<hr/> 922,000,000	<hr/> 1,383,000,000

The new system will be ready to operate in 1915. At that time the normal increase ought to provide 461,000,000 of new riders, or 198,332,000 more than I have estimated that the Independent System will carry the first year. This indicates that nothing will be taken from existing lines, and that there will be a large surplus for them to provide for.

The estimated capacity of the Independent System is 800,000,000 per annum. Five years after it begins operation, or in 1920, the normal increase of traffic in Greater New York will be 922,000,000, or 122,000,000 more than the Independent System can care for. Ten years after it begins operation, or in 1925, the total *new* traffic should be 1,383,000,000 per annum, or 583,000,000 more than the total capacity of the Independent System.

Can we shut our eyes to these possibilities? Are we never to learn anything from the past?

If we, for expediency, adopt a policy now that will prevent the City from building in the future an Independent System, we must place our sole reliance for future relief, on "regulated monopoly." Can we safely do it? Is it wise to do it?

Even if the Interborough be permitted to build extensions, it is imperative that the City begin right now to construct an Independent System, in order to meet the conditions which, within ten years after its completion, will be crying as loudly for relief as now. Why? Because the Interborough with all of its proposed extensions, will have a capacity of about 800,000,000 passengers per annum, the same as the Independent System. In 1925, only fifteen years hence, and only ten years after these systems can be put into operation, the growth of traffic will require the use almost of their combined capacity. The Interborough extended as proposed is not a cure—it is only a palliative. We must wake up to the magnitude of the problem if we are to deal intelligently with it.

If anyone is sceptical about the growth of traffic in New York, let me answer him in a few words. In 1904 the total traffic of the Brooklyn Rapid Transit Company was 400,000,000. Had anyone predicted then that six years later, or in 1910, the traffic on this same system would be 600,000,000, an increase of more than 200,000,000 in six years, he would have been considered a false prophet. Had anyone predicted that the present Subway, which had 138,000,000 passengers in 1906, would carry 269,000,000 passengers in 1910, an increase of 130,000,000 in four years, he would have been adjudged a paranoiac. We must have imagination—vision, not of the limited hat-brim variety, but of the giant order to deal effectively with this huge problem.

THE INTERBOROUGH PLAN.

This plan provides for extensions of the present Subway as follows:

(a) Lexington Avenue from 42nd Street to the Bronx, taking in the two branches to Woodlawn Cemetery and Pelham Bay Park (the Lexington Avenue section is an essential part of the back-bone or trunk of the Independent System, and its use by the Interborough would effectively destroy all possibility of an effective Independent System).

(b) Seventh Avenue from 42nd Street to the Battery.

(c) Liberty Street and tunnel under East River to Flatbush Avenue, Brooklyn, via Pineapple Street.

(d) Lafayette Avenue to Broadway, Brooklyn (also a part of the Independent System).

(e) Fourth Avenue Subway, Brooklyn, and part of Centre Street loop, to be operated if City will pay deficiencies (this is also an important part of the Independent System).

The Interborough estimates that the cost of these extensions will be \$128,000,000. It proposes that the City supply \$53,000,000 and the Interborough \$75,000,000. That net earnings of these extensions, over and

above operating costs (not including any part of the earnings of the present Subway) be applied.

First. To the payment of interest and sinking fund on the \$75,000,000 of Interborough money, and

Second. To the payment of interest and sinking fund on the \$53,000,000 of City money.

That there shall be a universal five-cent fare over the entire Subway as extended. That, at the end of ten years after beginning of operation, the City may have the right to buy these extensions by paying the Interborough the cost thereof, less City money, as well as the value of the equipment supplied by it, plus 15%.

It proposes that the earnings of the extensions be determined by the number of tickets sold at stations or taken in at ticket-chopping boxes at stations on said extensions.

Also that all surplus earnings of these extensions for the first five years shall go to the City, and thereafter that they be equally divided between the Interborough and the City.

These are the essentials of the proposition, and this is the subject with which the Board of Estimate and Apportionment and the Public Service Commission are now wrestling.

The Interborough also proposes that its present lease of the Subway, which has 44 years to run and a privilege of a 25-year renewal (upon terms to be agreed upon) shall be reduced to a fixed term of 49 years from the beginning of operation of the extensions. This is equivalent to a fixed term of 54 years, since the extensions cannot be completed for five years; that its lease of the line from City Hall, New York, extending under the East River to Flatbush Avenue, Brooklyn, which has about 32 years to run, with a privilege of a 15-year renewal (on terms to be agreed upon), shall be changed to a fixed term of 54 years, so that its lease of the entire Subway system shall expire 54 years hence.

I shall not attempt to discuss the Interborough plan in all of its details, as I do not want to overtax your patience for the amount of time which would necessarily be consumed. I shall, therefore, confine myself to a few only of its phases.

INTERBOROUGH EXTENSIONS.

I submit a map showing the Interborough extensions disconnected from the present main line, in order that you may see just what sort of system the City would have the right to purchase at cost plus 15% at the end of ten years after their operation begins. (Exhibit 3.)

You will observe that these disjointed pieces of track would be of no value whatever to the City or anyone else but the Interborough Company, and that a large amount of additional money would have to be expended on the necessary connections and additions in order to create out of them any sort of effective transportation facility.

First of all a connection would have to be built from Lexington Avenue to Seventh Avenue.

Even this would be of little value, because people who have been accustomed to transportation by a direct line from the Bronx down the East Side to the business section of the City, would not submit to a wide detour from 42nd Street and Lexington Avenue to Seventh Avenue and then be carried down the West Side and landed in the lower part of the City under the Ninth Avenue elevated railroad. It would be absolutely essential, therefore, to construct the line under Lexington Avenue and Broadway from 42nd Street to the Battery.

In Brooklyn, various extensions would have to be built in order to connect the Lafayette Avenue, the Flatbush Avenue and the Pineapple Street sections with each other and with the Fourth Avenue subway.

Careful estimates of engineers show that these additions and connections would cost \$31,000,000. Even then it would be a badly-balanced system. There would be four tracks in Seventh Avenue and four tracks in Broadway south of 42nd Street, a total of eight tracks, fed by only four tracks north of 42nd Street. Such a system would be an engineering and operating abortion.

Exhibit 4 shows the detached sections in solid lines and the necessary connections in dotted lines.

The right of the City to oust an operator at the end of ten years is of incalculable value, provided it extends to something which is complete within itself, and provided also that a financial plan is adopted whereunder the City can, at the appointed time, exercise this right.

In order that the merits of the two plans may be fully understood, it is necessary to project ourselves ten years into the future, and see what will be the City's position at that time under the two plans. The following is a statement showing what will be the cost to the City to acquire either system at the end of ten years

Cost to the City to Acquire either System at the end of Ten Years

	INTERBOROUGH	INDEPENDENT
City's original investment	\$ 53,000,000	\$107,000,000
Private capital to be reimbursed	75,000,000	47,000,000
Fifteen per cent. additional on private capital	11,250,000	7,050,000
Cost of Connections to Complete System;		
Lexington Avenue to Seventh Avenue	4,323,000	
White Plains to Pelham Park Branch	585,000	
Brooklyn Extension to Fourth Avenue Subway (Willoughby St.)	1,335,000	
Lafayette Avenue to Fourth Avenue Subway	600,000	
Eastern Parkway to Fourth Avenue Subway	2,000,000	
Lexington Avenue Line from Forty-second Street to Battery	23,000,000	
Total Cost	<u>\$171,093,000</u>	<u>\$161,050,000</u>
Less Credits;		
Sinking Fund of 1% per year on private capital:		
Interborough, 10% in ten years on \$75,000,000	7,500,000	
Independent, 10% in ten years on 47,000,000		4,700,000
Sinking Fund of 1% per year on City investment:		
Interborough, 10% in ten years on \$53,000,000	5,300,000	
Independent, 7% in seven years on \$107,000,000		7,490,000
Profits resulting to the City from its equal participation in surplus earnings (after deduction of all fixed charges.)		13,363,000
Total Credit	<u>\$ 12,800,000</u>	<u>25,553,000</u>
Net Cost	\$158,292,000	\$135,497,000
Less City's original investment	53,000,000	107,000,000
New Money Required of City at the End of Ten Years	<u>\$105,293,000</u>	<u>\$ 28,497,000</u>
Length of single track	84 miles	106 miles

Independent System provides 22 miles of track more than Interborough.

Independent System is a complete system in itself. The City can take it over at the end of ten years without any additional construction,

Whereas;

Interborough extensions are all disconnected and if the City takes them over at the end of ten years the City will have to spend \$31,000,000 of new money to build the necessary connections to create a system.

The Independent System can be acquired at the end of ten years upon payment by the City of the small sum of \$28,497,000, whereas, the Interborough extensions with the additional money required to connect them and to create a new system, will require the City to pay \$105,293,000. After this has been done, the "Interborough Extension System," so to speak, will have 22 miles of track less than the Independent System, and it will have cost the City \$22,796,000 more in actual money. The Independent System will have been in operation for ten years, with a well-established business, earning large profits, whereas, the "Interborough Extension System" will have to be created anew, and will have to build up a traffic for itself.

The Independent System will be superior in its general construction and equipment to the Interborough system, and will have a larger capacity, because the cars will be 66 feet long as against the Interborough's 52-foot cars, insuring larger capacity and greater economy in operation, and the dimensions of the tunnel will be larger, assuring better track, better operating conditions, better ventilation.

In order to make the City's right to purchase the Interborough extensions at the end of ten years of any value whatsoever, the City would have to begin immediately to create a fund which, at the end of fifteen years from to-day, would amount to \$105,293,000. Approximately, \$7,000,000 per annum would have to be set aside immediately to put the City in position to take over the Interborough extensions at the end of ten years and build the additional lines required, whereas, the City would have to accumulate \$10,000,000 per annum for five years only to build the Independent System, because it has \$60,000,000 already available for this purpose, and as it will require five years to build the Independent System, the whole financial and physical operation can be consummated within that time.

If the City has to begin now to set aside a sinking fund to buy the disjointed Interborough extensions at the end of ten years, and to build the necessary connections and additions thereto, it would be much wiser to abandon such a plan and to devote a far less sum of money to the creation of the complete and efficient Independent System, which it can take over at the end of ten years without additional expenditure, and at that time come into possession of a complete system with an established traffic and earning a large and profitable surplus.

TRANSFERS.

The chief argument in favor of the Interborough plan has been the universal five-cent fare.

This does not mean, as some people seem to infer, that there shall be a universal five-cent fare over all surface, elevated and subway lines in New York and Brooklyn. It means only that there shall be a five-cent fare

over the present subway and the extensions proposed to be made to that subway.

Personally I do not believe that this transfer privilege is of substantial value to the great mass of the travelling public. It is more imaginary than real. To-day one has the privilege of travelling over the present subway from the Yonkers line to Flatbush Avenue, Brooklyn, for a five-cent fare, but what percentage of people exercise this privilege? It is too small to calculate. Nearly every person who uses the subway or the elevated lines, completes his journey on one or the other of these facilities. That journey is usually between his place of business and his home. The great mass of people who are transported over the rapid transit lines are interested more in having a quick and comfortable journey between their homes and places of business than in a transfer privilege of which they would rarely, if ever, avail themselves. What these people want is more comfort and more speed for the five-cent fare, and it is not reasonable nor just to sacrifice the interests of the great mass of the people in order that the relatively few may transfer at rare intervals to some connecting line.

Aside from this, however, it must be borne in mind that the Interborough system comprises about 84 miles of single track. It reaches fewer of the important business and residential points in the Bronx, Manhattan Island and Brooklyn, than the proposed Independent System, which is composed of 106 miles of single track, 22 miles more than the Interborough. For a five-cent fare one will be carried farther on the Independent System, and to a greater number of important points in all these Borough, than can be reached by the present subway. The Independent System, in other words, offers more for five cents than the present Interborough can offer, and offers almost as much as the present Interborough with its proposed extensions, can offer.

But, if the universal transfer is so desirable or so indispensable, then it can be secured without sacrificing the great benefits of the Independent System. How? By a clause in the operating contract, requiring the operator of the Independent System to transfer at such connecting points with the present subway as the City authorities may, from time to time, direct. But suppose the Interborough refuses to consent to such an arrangement? Then it might be accomplished by refusing to permit the Interborough to third track or make extensions of its elevated lines (privileges of great value which it has for years been trying to get) except upon the condition embodied in the Franchise, that the Interborough shall transfer with future intersecting subway lines for a single fare of five cents at such points as the City authorities may, from time to time, determine. The same provision should also be inserted in any contract which may be made with the Interborough Company for extensions of its present subway, so that whether the Independent subway be constructed immediately or not, it will be within the power of the City to compel an exchange of

traffic at a single five-cent fare, between all subways which are built with the aid of City money, at such points of intersection as the City authorities may deem to be in the public interest.

This transfer privilege is especially justifiable where the City furnishes all or any part of the funds needed for the construction of subway systems. Why? Because the company thus aided gets the benefit of a low interest rate on the money supplied by the City, as well as exemption from taxation on the structure. These advantages which accrue to the operator from the use of the property of all the people, should be compensated for by a universal transfer privilege to the people. The cost of carrying a passenger on any given line is less where the interest charge on the money is low and where there is exemption from taxation, than upon a line where the interest charge is high and there is no exemption from taxation.

The operation of an Independent System of the kind I have suggested, and the operation of the present Interborough system, even without any extensions and a universal transfer between them, would supply the public with a larger measure of convenient rapid transit and insure a better service than any other plan that can, in my opinion, be devised.

QUICK RELIEF.

It has been urged in support of the Interborough plan that it assures quicker relief than the Independent System can provide. This is an error. The determining factor of relief in the Interborough's plan is the construction of the Seventh Avenue subway from 42nd Street to the Battery. It is not likely that this extension can be built in less than five years. Before any work can begin it is necessary for the City to extend Seventh Avenue, through private property from its southern terminus, to Varick Street. This necessitates the condemnation of a large amount of real estate, with all of the incident delays and court proceedings, as well as the approval by the Court of the Seventh Avenue line as a rapid transit route. An extremely complicated and difficult piece of engineering work is necessitated for the junction of the Seventh Avenue line with the present subway at Times Square. Five years at least would seem to be required to accomplish this part of the work. By that time the other extensions proposed by the Interborough could be completed. By the same time the Independent System can also be completed. All of the routes of the Independent System have been approved by the courts with the exception of a few short connections proposed in the plan I have submitted, and these can readily be obtained before the work has far progressed, and need not in any wise delay it.

While Seventh Avenue is being opened through private property to Varick Street, and the necessary court proceedings are being taken to authorize the construction of a subway between 42nd Street and the Battery, proceedings for the Madison Avenue extension of the Interborough

can go along with it and be completed by the time that the Seventh Avenue route can be perfected. The objection raised by the Chamber of Commerce Committee that there would be a great loss of time in obtaining the courts' approval of the Madison Avenue line is, therefore, entirely overcome.

I desire to repeat that the Interborough cannot give any quicker relief than the Independent System, as each will require about the same time for construction.

42ND STREET SHUTTLE.

In considering the Interborough offer, a serious question affecting operation arises in connection with the necessity under which that company will be compelled to operate the so-called "H" system, viz: to run a shuttle service between Times Square and the Grand Central Station, if the maximum capacity of the proposed "H" system is to be developed. All passengers on the West Side will have to change at Times Square to reach the Grand Central Station. If they want to continue their journey down Fourth Avenue to 23rd Street or Astor Place, or any other point, on the present subway south of 42nd Street, they will have to change again at the Grand Central Station, and vice versa, all persons going up the West Side from the present subway south of 42nd Street, will have to change at the Grand Central Station to a shuttle train and then change again at Times Square in order to make the journey.

Here is presented at once the same problem which will have to be faced ten years from now if the City should take the upper part of Lexington Avenue and connect it across 36th Street to the proposed Seventh Avenue extension, and attempt to force the travelling public to ride on this roundabout route after it has been accustomed for ten years to direct transit from the Bronx to the Battery. The people will never submit to such a change.

It must never be forgotten that once a route of transportation has been established, and the people have been accustomed to its use for a long time, a vested right accrues to the people to be transported over that particular route, and a vested right of property accrues in that particular route because great business interests have grown up around it, and have been established upon the faith of a continuance of the transit facilities so provided. Any change in these established routes works great injustice and inconvenience to the people as well as to property interests. The people of the upper West Side, and property owners there, as well as property owners in Fourth Avenue, where great business houses have been constructed in the last few years, do not realize how seriously their interests may be affected by this threatened change. I do not undertake to say how the Interborough Company will operate its new extensions, but I do say that the maximum capacity which these extensions are built to supply,

can never be attained by any other means than the operation of a shuttle under 42nd Street with all of the inconveniences and discomforts which that implies.

TEN-YEAR TERM.

POSSIBILITY OF INTERBOROUGH SECURING THE OPERATION OF THE INDEPENDENT SYSTEM BY BIDDING FOR IT OR SUBSEQUENTLY ACQUIRING CONTROL OF ITS OPERATOR.

It has been stated that, even if the City built an Independent System, it would have to ask competitive bids for its operation. Those who make such an assertion are either ignorant of the law or misinformed. It is not necessary to ask for competitive bids for the operation of the Independent System any more than competitive bids are required for the operation of the proposed Interborough extensions. In either case it rests entirely within the discretion and control of the Public Service Commission and the Board of Estimate and Apportionment to contract with an operator without competitive bidding. The law only requires that such contract shall not be perfected until public hearings thereon have been held. The reason for this is obvious. If the City were desirous of preventing a monopoly, its purpose would be thwarted if a monopoly could bid for the Independent System and compel the acceptance of its offer merely because its price, in money, was less. The authorities have the right, under the laws, to award the operating contract to such operator and upon such terms as, in their judgment, is to the best advantage of the public. Naturally, the authorities would not award such contract to the monopoly, either upon a direct bid from it or knowingly upon the bid of a masked company organized in its interest.

EFFECTIVE PREVENTION.

There is a simple and effective way, however, to prevent any such occurrence. Under the Indeterminate Franchise Act, the City has the right to acquire the Independent System at the end of ten years upon payment of the cost of equipment plus 15%, and, at any time *after* ten years upon payment of cost with a diminished percentage. By putting a clause in the operating contract that the City shall have the right *at any time*, upon twelve months' previous written notice, to take the property from the operator upon payment of the cost of equipment plus 20%, control of the situation would be absolutely in the hands of the City, and the prevention of monopoly would always be assured. The law justly provides that a *diminished* percentage shall be paid *after* the end of the ten-year term, and with equal justice the contract may provide for an *increased* percentage if the City takes the property *before* the end of the ten-year term. With such a protective provision, no operator would be deterred from taking a lease.

GOOD BEHAVIOR OF OPERATOR.

With the showing I have made of earning power for the Independent System, I do not hesitate to say, regardless of all the advantages which the public would derive in the way of improved service and facilities, that the construction of the Independent System by the City is justified as a business proposition only. It is time, also, to establish the principle, in such a striking and effective way as this will do, that the City shall benefit to a large degree in its future rapid transit development. With an operating contract such as I have described, the operator will, at all times, be upon his best behavior in the management and conduct of the property, because he will know that his tenure and the continuance of his profits depends absolutely upon decent treatment of the public, which is only another way of saying that he will, at all time, give the best service, in the way of speed and frequency of trains, quality and lighting of the cars and stations, cleanliness, deportment of employees, and general administration.

The value of these features cannot be over exaggerated. I can best illustrate them by asking this question—suppose that the contract under which the Interborough is now operating the subway had in it a provision that ten years from the date of beginning of its operation, the City had the right to terminate the lease and repossess itself of the subway upon payment of the cost of equipment plus 15%? Do you suppose that the subway would be as indifferent to public opinion as it is to-day? No. The operator would, on the other hand, be putting his best foot forward to please the public, because he would know that in the absence of popular approval and support, the end of his profitable lease was already in sight. And if the City did have this right, what would it not be worth in a business sense? Three years hence it would take over the present subway by paying to its owners something like \$45,000,000 and come into possession of a property earning a splendid surplus over all charges. Are we going to throw away another opportunity to control our subways and earn large profits for the public Treasury?

REGULATED MONOPOLY.

It does not seem to me necessary to enter upon a discussion of the relative advantages of competition and monopoly. The competition which I have in mind is not one in destructive rates, but in the quantity, quality and character of the service provided by the railroad company. Not only does such competition, more than any other single agency, stimulate improvement and efficiency in the service over the roads themselves, but also in the treatment accorded by the officers and employees of the companies, to the great public. More than this, while the lines may not be competitive at all points, there will be a competition between sections on the different lines. Take the Bronx, for instance, suppose the two companies were operating in this territory, one having a line on the East Side of the

Bronx and another on the West Side. The seekers of suburban homes would undoubtedly locate along the line of that road which gave the best service in the matter of speed, comfort and general convenience. Each company, therefore, in order to build up the vacant territory on its respective lines, would have to put its best foot forward to get results. All intermediate territory along each line would be benefitted by the superior service thus induced.

Monopoly under regulation has not proven satisfactory. As I have said before, regulated monopoly is a beautiful theory, but it does not "pan out" in practice. We have tried it here for five years. Are you satisfied with the results? Not a foot of new subway has been built, and it is with extreme difficulty that needed improvements have been secured. There is no railroad man who does not know that regulation by the most powerful Public Service Commission on earth can only go to a certain point. No Commission can effectively control schedules or the amount of service to be given over a road. No Commission would dare to take the risk of ordering trains run at a higher rate of speed than the managers of the road declared to be safe. No Commission can so effectively enforce its orders for regulation of train schedules, quantity of train service, etc., as will accomplish the desired result against the opposition of an unwilling or reluctant management. This is particularly true as to the quality of the service rendered. There are infinite numbers of ways of thwarting the Commission's will. Not only that, but the constitutional right of property, that is, the right to control and to manage one's own property, forbids the interference of any Commission beyond a certain well-defined line. While we have heard it iterated and reiterated lately that the present subway is the City's property, the Interborough Company, in refusing recently to obey an order of the Public Service Commission, declared that such an order was an interference with its right of ownership and control of *its* property. The subway is the Interborough's property for 69 years, because it has a lease from the City for that length of time, and no one can interfere with its right to the use and enjoyment of that property until that lease expires. The Commission is already, therefore, confronted with the assertion of the very constitutional right of which I speak, viz: the right to control and manage private property.

A lease is just as much private property, and is just as sacred a property right, as any form of property, and no Commission can deprive the owners of its use and enjoyment. The Commission may regulate, within reasonable limits, but no more.

The greatest regulative weapon is the right of the City to oust an offending operator, upon twelve months' notice, and put in another who will give satisfaction. If all "transit companies look alike and are alike," and are bad in their likeness, then it is high time to create a new and right type. The City has the chance, for the first time in its history, to produce

an ideal transportation system and to have it ideally operated, and, at the same time, to make money for the tax payers.

ONE COMPANY EASIER TO REGULATE.

Why should it be any more troublesome for the Public Service Commission to regulate two subway companies than one? The Commission seems to be composed of able-bodied and husky men who are not in need of relaxation from undue strain. Seriously, however, I claim that two companies in healthy rivalry are easier for the Commission to regulate than one unwilling and recalcitrant company. This rivalry will do more automatically in the way of regulation than all the orders that the Commission can promulgate. The Commission will get so much relief from the annoyance of the rapid transit problem after the Independent System is established, that its members will find their positions "things of beauty and joys forever."

But if it is an argument for "monopoly" that the ease of the Commission is a factor to be considered, then it might be argued that all public utilities, such as gas, electric light, telephone and transportation lines, be combined into one company. Nobody would favor that.

The truth is, that we have attempted to regulate monopoly not because we believe that regulated monopoly is *good*, but because we know that *unregulated* monopoly is *bad*. Regulated monopoly is better than unregulated monopoly. Un-regulated competition is better than regulated monopoly; but *regulated* competition is better than un-regulated competition or regulated monopoly. What we want and what we must have is *regulated competition*.

There are many other interesting features of this problem that I would like to discuss, but my feeling of consideration for you admonishes me to stop. In conclusion:

HOW MAY WE GET NEW SUBWAYS?

It seems to me that the City so thoroughly holds the whip hand in the situation that definite action can be taken quickly without in any wise interfering with negotiations with possible builders or operators of additional subways.

1. Let the City begin to build the Independent System and negotiate with the Interborough and all other companies while the work is in progress.

Don't postpone construction to negotiation, but postpone negotiation to construction.

2. Revise the plans of the Triborough route on the smaller dimensions, with nine inches more in vertical height than the present Interborough section; change "reservoir stations" into stations with loading and

unloading platforms; provide for the connections of the Centre Street loop at Spring Street and at Vesey Street and Broadway.

Contracts for construction might be let upon the bids already received, with a stipulation that the City may have the right to change the dimensions, station plans, etc., as above suggested, and that the unit bids shall apply to the decreased dimensions, etc., in precisely the same way that they apply to the larger dimensions upon which the bids were based. If these contracts should be awarded under these conditions, work can be begun immediately, and the revision of plans can go along with it so that no time whatever would be lost.

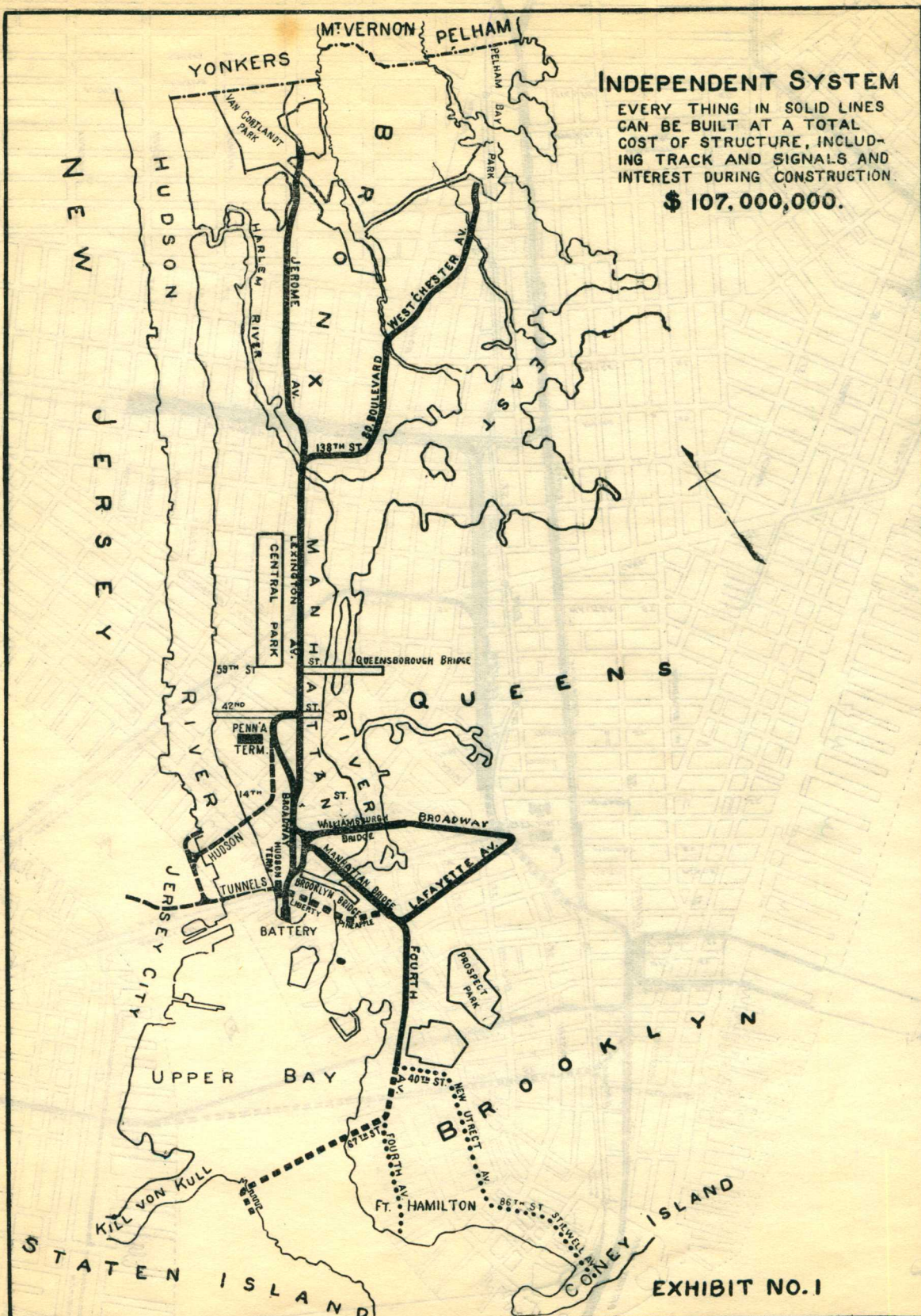
3. Whether the Interborough extensions are built or not, the Independent System will be needed and should be built by the City under any circumstances. The sooner this work is begun the better.

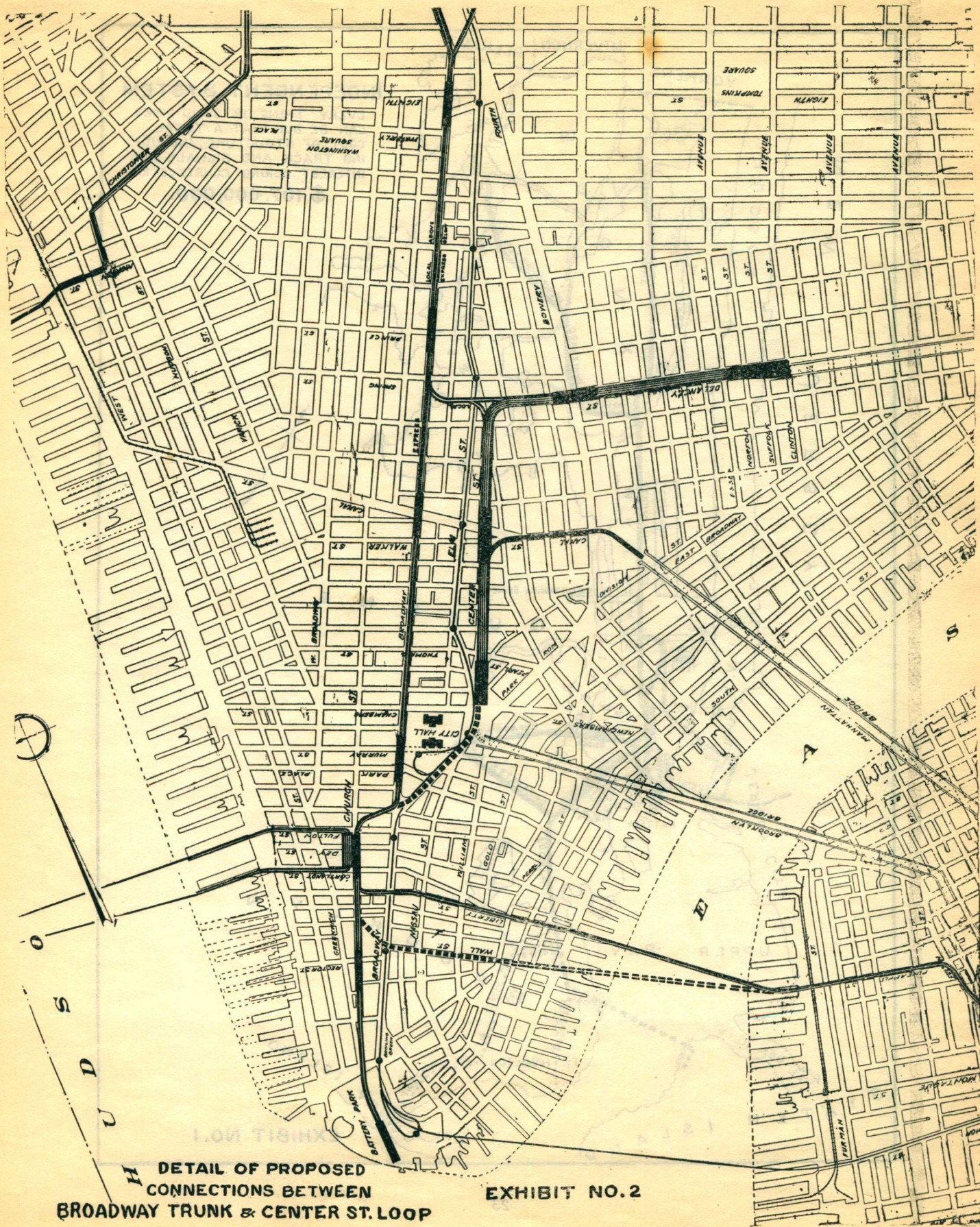
4. It would be wise to negotiate for an operator for the Independent System as soon after the beginning of its construction as possible, because the operator can be of great service during the construction period. If he is experienced, his knowledge of operating conditions will make it possible to effect large economies in the cost of construction as well as promote greater efficiency and capacity in the system.

5. Delays in consummating an agreement or arrangement with the Interborough Company, or with any prospective operator of the Independent System, would not, under this plan, delay the prompt beginning of construction and completion of the Independent System.

6. From every point of view this course is of advantage and is to the best interests of the City of New York. Tactically and strategically, it is the sound and sensible thing to do in any consideration of this question which implies proper regard for the interests of all the people, regardless of any local section or clique or faction. The welfare of the people as a whole must, as it should, be the determining influence. The time has come when the *real* people must be considered. The views of civic bodies and interested persons must not be taken too seriously. The *real* people are the masses, who use the subways most, and it is their interest, because they are most affected, which should have the first claim.

Once the City begins to construct the Independent System progress in every direction will be easier and it will be easy to secure terms that the City ought to have. If you will excuse a homely metaphor, the City holds "Four Aces" in this Subway game and it ought not to lay them down to anybody's "Bob-tail Flush."





H DETAIL OF PROPOSED
CONNECTIONS BETWEEN
BROADWAY TRUNK & CENTER ST. LOOP

EXHIBIT NO. 2

**INTERBOROUGH EXTENSIONS
WHICH CITY COULD
TAKE AT END OF
10 YEARS.**

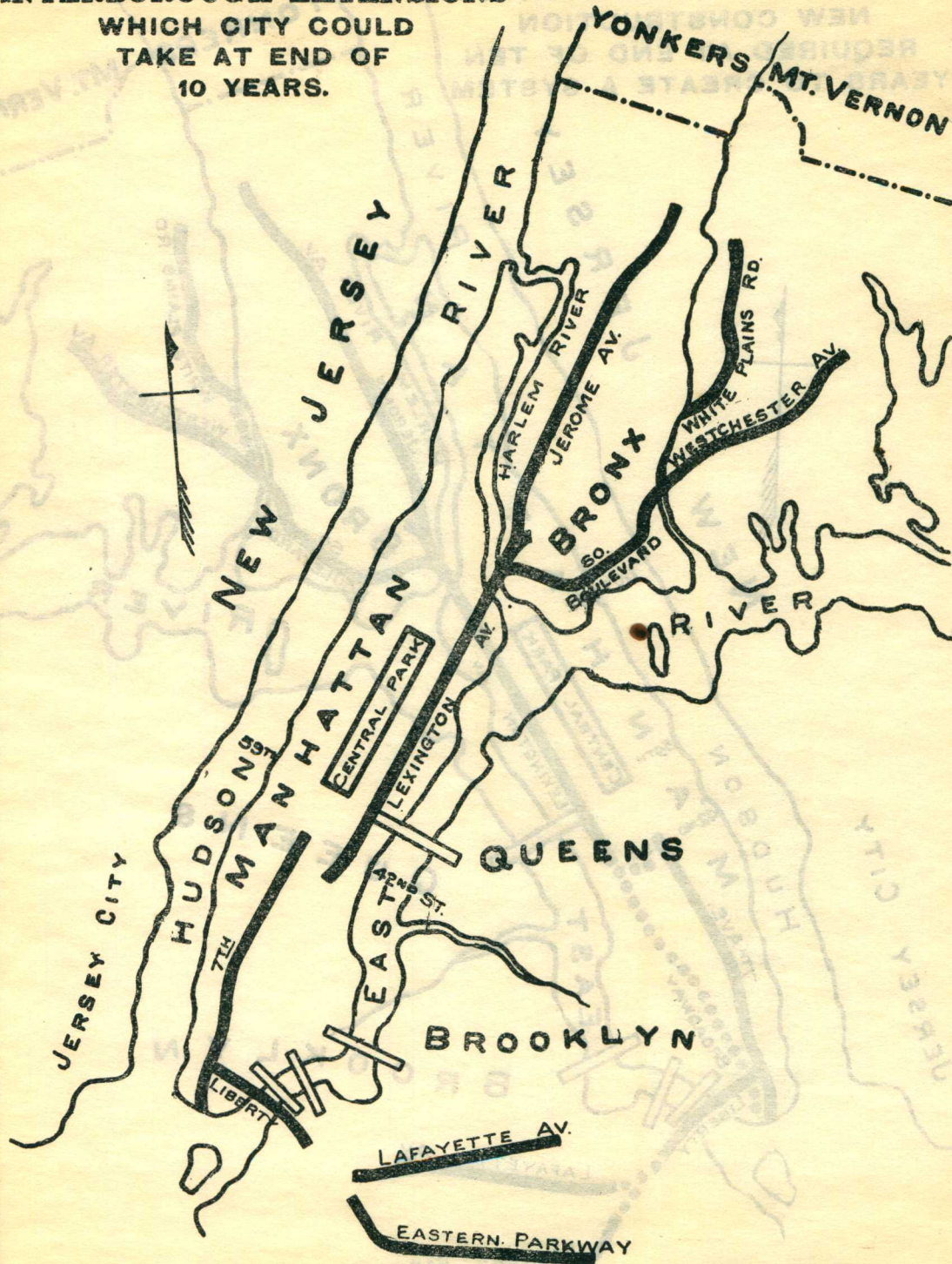


EXHIBIT NO.3

INTERBOROUGH EXTENSIONS

IN SOLID LINES.
 DOTTED LINES INDICATE
 NEW CONSTRUCTION
 REQUIRED AT END OF TEN
 YEARS TO CREATE A SYSTEM

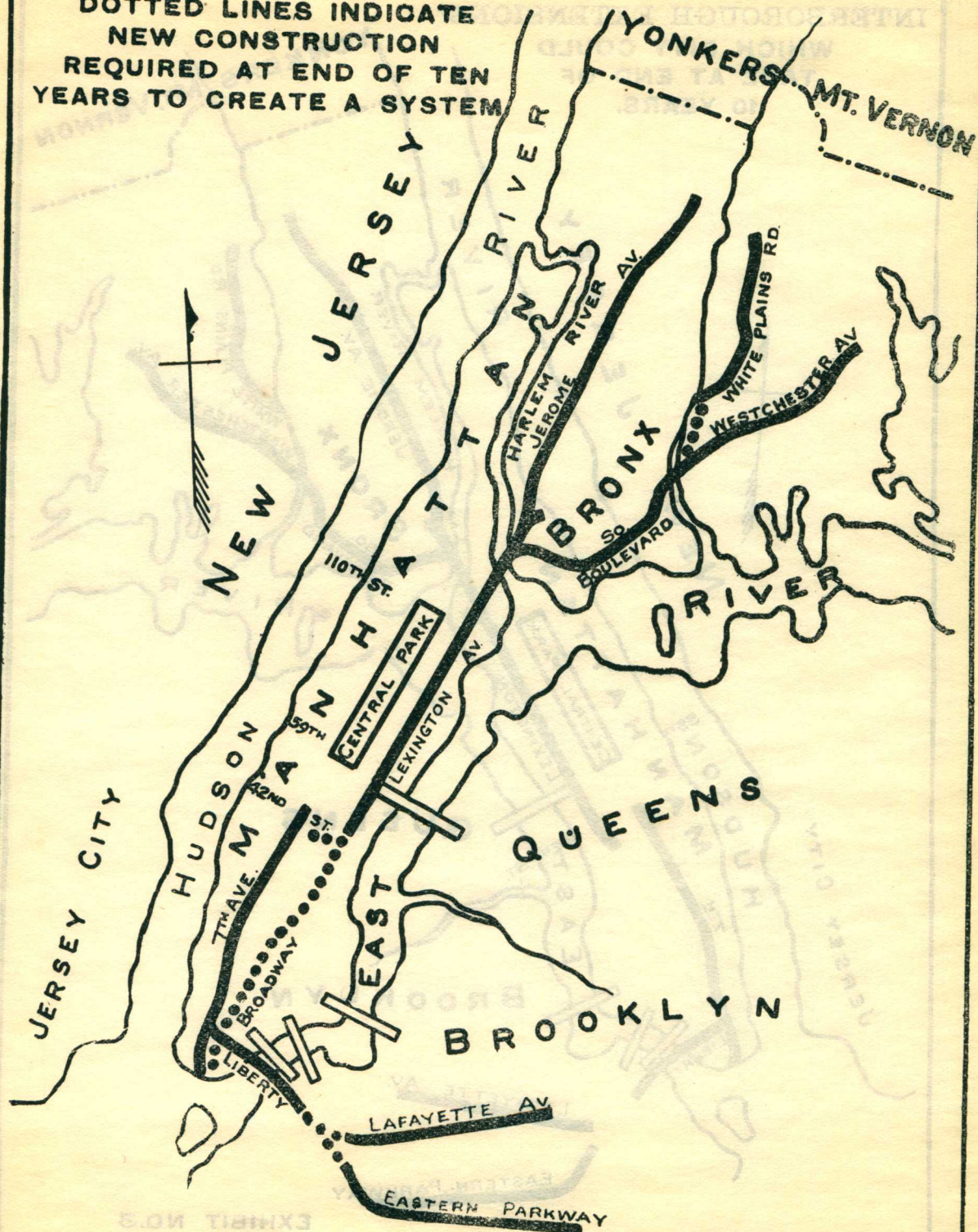


EXHIBIT NO.4

